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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/684,094	10/06/2000	Bernhard H. Weigl	SSMV33.1	1122

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EXAMINER

HANDY, DWAYNE K

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 07/01/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/684,094

Applicant(s)
Weigl et al.

Examiner
Dwayne K. Handy

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1743



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on the amendment/arguments filed 4/11/03.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3, 6, 7, 9, 13, and 14 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9, 13, and 14 is/are allowed.
- 6) ☒ Claim(s) 3, 6, and 7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other: _____

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DETAILED ACTION

Inventorship

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claim 3 was previously rejected under 35 U.S.C. 103(a) as being unpatentable over Lipshutz et al. (5,856,174) in view of Parsons et al. (5,248,479). This rejection remains, please see Response to Arguments below.

5. Claims 6 and 7 were previously rejected under 35 U.S.C. 103(a) as being unpatentable over Yager et al. (5,716,852) in view of Lipshutz et al. (5,948,684).

Response to Arguments

6. Applicant's arguments filed 4/11/03 have been fully considered and are persuasive as they pertain to claims 9, 13, and 14, but they are not persuasive in arguing claims 3, 6, 7.

In reference to claims 3 and 4, applicant has again argued that the instant claims are distinguishable over the cited art Parsons since Parsons does not teach an absorbent member that would form a moving fluid front for increasing the driving force through a channel. . The Examiner disagrees. Applicant has claimed an absorbent material coupled to the outlet of a channel. As mentioned previously in arguments, the Examiner believes that this is what is

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provided in the reference. Parsons shows an absorbent member (4) at the end of the entry channel which is used to draw a fluid through the channel. The absorbent of Parsons has the same shape as that of applicant and applicant has not claimed any special property or feature of the absorbent which provides the fluid drawing property other than the shape. Therefore, the claims remain rejected.

In reference to claim 6, applicant has argued that gravitational flow distinguishes the amended claim over the references. The Examiner contends this would be an intended use of the device. That is, for gravitational flow to even be a consideration, the device would have to be used in a manner which encourages a downward flow. As this has not been cited in the claim, the Examiner fails to see how simply flowing material in the channel would provide an additional component of flow control which is not already provided in the cited references.

In reference to claim 7, applicant has argued that the instant claim is distinguished over since the references do not contain a "template" but merely a number of viewing ports. The Examiner again fails to see how a "template" is distinguishable over a number of viewing ports. Applicant has placed no structural limitations on the template but merely claims that this template may be used to determine the concentration within said channel. This is also what the references cited by the Examiner state is possible with their viewing port. If applicant wishes to distinguish the "template" of viewing element over the ports cited by the Examiner, some structural elements which are different than the references would be required at the very least.

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Allowable Subject Matter

7. Claims 9, 13, and 14 are allowed.
8. The following is a statement of reasons for the indication of allowable subject matter:

In claim 9, applicant has claimed a microfluidic device with a first reservoir with a first outlet, a first channel coupled to the first outlet, a second reservoir with a second outlet, a second channel coupled to the second outlet, a main microfluidic channel having an inlet coupling region for coupling the first and second channels which has a greater width than said main channel so that liquid driven by gravitational force entering the coupling region from either channel outlet flows into said main microfluidic channel without trapping an air bubble within the outlet opening of the other channel. The Examiner did not find prior art which teaches or suggests this combination of features.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a):

a shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR


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1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne K. Handy whose telephone number is (703)-305-0211. The examiner can normally be reached on Monday-Friday from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden, can be reached on (703)-308-4037. The fax phone number for the organization where this application or proceeding is assigned is (703)-772-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0661.


Jill Warden
Supervisory Patent Examiner
Technology Center 1700

dkh

June 30, 2003